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EXAMINER	
KHAN, ASHER R	

ART UNIT	PAPER NUMBER
2481	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/751,410	SUH, JONG YEUL	
	Examiner	Art Unit	
	ASHER KHAN	2481	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/02/2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6-21,23,24 and 27-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6-21,23,24 and 27-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04/08/2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 11/05/2010 have been fully considered but they are not persuasive.

In re page 8-9, Applicant's argue that Matsugami does not teach or suggest the claimed combination of features including the initialization of the identifying information for identifying a success and a failure of recording of each of more than one broadcasting programs, and changing the identifying information of the single broadcasting program if the recording of the single broadcast program is successful.

In response the Examiner respectfully disagrees. Matsugami discloses a controller configured to initialization of the identifying information for identifying a success of recording of each of more than one broadcasting programs (Fig. 5, program reservation table show a circle for success of recordings) and to changing the identifying information (Para. 0055, recording complete flag) of the single broadcasting program if the recording of the single broadcasting program is successful (step S4e, Fig. 4). While Matsugami discloses the identifying information for identifying a failure of a recording (Paras. 0050, 0053 and 0054; storing missed recording element 426 or complete program record limit in recording completion events).

Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1, 3, 6, 8, 9, 12-15, 19, 23-24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Pub. 2007/0031111 to Thiagarajan et al. "Thiagarajan" in view of U.S. Patent Pub. 2003/0099462 A1 to Matsugami and in further view of U.S. Patent Pub. 2002/0110360 A1 to Potrebic.**

As to claims 1 and 14, Thiagarajan discloses recording system for recording a broadcasting program (Fig. 1) comprising:

a channel demodulating part configured to receive and demodulate the broadcasting program on a particular channel (Tuner 306; Paras. 0031;0037);

a storage medium configured to store the broadcasting program (Para. 0038); and

a recording processing part configured to store the identifying information for identifying a failure of a recording (Paras. 0050, 0053 and 0054; storing missed recording element 426 or complete program record limit in recording completion events), to identify the identifying information (program recording completion events) of the broadcasting programs, and request re-transmission of the broadcasting programs program intended to record through a network when the identification information of broadcasting programs is not changed (Paras. 0014;0047;0049-0050; information to complete a incomplete program recording of a program, Para. 0049)

Thiagarajan does not expressly disclose a controller configured to initialize identifying information for identifying a success of recording of each of more than one

broadcasting programs, when recordings of the more than one broadcasting programs are scheduled at the same time, to select a single broadcasting program among the more than one broadcasting programs and control to record the selected broadcasting program, and to change the identifying information of the single broadcasting program if the recording of the single broadcasting program is successful.

Matsugami discloses a controller configured to initialize identifying information for identifying a success of recording of each of more than one broadcasting programs (Fig. 5, program reservation table) and to change the identifying information (Para. 0055, recording complete flag) of the single broadcasting program if the recording of the single broadcasting program is successful (S4e, Fig. 4).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine Thiagarajan with the teachings of Matsugami. Motivation to combine would have been to allow confirmation of recording so that it can be determined that the program has been recorded. Resulting in a device that is able to distinguish between recordings that are successfully recorded.

Thiagarajan and Mastugami as modified do not expressly disclose when recordings of the more than one broadcasting programs are scheduled at the same time, to select a single broadcasting program among the more than one broadcasting programs and control to record the selected broadcasting program.

Potrebic discloses when recordings of more than one broadcasting programs are scheduled at the same time, to select a single broadcasting program among the more

than one broadcasting programs and control to record the selected broadcasting program (Figs. 3 and 4, Paras. 0070 and 0080).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine Thiagarajan and Matsugami as modified with the teachings of Potrebic. Rationale to combine would have been that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As to claim 3, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses wherein the storage medium is a hard disc (Para. 0015).

As to claims 6 and 19, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses wherein the controller is further configured to initialize the identifying information (Paras. 0048-0049; configuration of program recording completion event) and the recording of the broadcasting program intended to be recorded is successful (Fig. 5;Paras. 0049) and if the recording of the broadcasting program intended to be recorded fails (Fig. 5; Para. 0060).

However Thiagarajan and Potrebic as modified do not expressly disclose a recording flag value at the recording processing part to a first identifying information value in response to the recording command signal, to set the first identifying

information value to a second identifying information value, and controls to maintain the first identifying value as it is.

Matsugami discloses a recording flag value at the recording processing part to a first identifying information value in response to the recording command signal, to set the first identifying information value to a second identifying information value, and controls to maintain the first identifying value as it is (Para. 0055).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine Thiagarajan and Potrebic as modified with the teachings of Potrebic. Rationale to combine would have been that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As to claim 8, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses wherein the recording processing part includes: a recording parameter storage part configured to store the identifying information and information on the broadcasting program intended to record; and

a network interface part configured to identify the identifying information, to request the re-transmission of the broadcasting program intended to record through the network when recording of the broadcasting program intended to record fails (Figs. 4 and 5; Paras. 0066-0074).

As to claim 9, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses wherein the recording parameter storage part is a ROM (read-only memory) (Fig. 3, non volatile memory 316; Para. 0038).

As to claim 12, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses and wherein the network interface part is-includes at least one of a LAN Card (Fig. 2, Ethernet 218 (Ethernet is used with a LAN) and a MODEM (Fig. 3, MODEM 334).

As to claim 13, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses wherein the network interface part is further configured to be connected to a program server or a broadcasting station for communication (Fig. 1, Broadcast transmitter 130) (Para. 0021).

As to claim 15, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses wherein the user's recording setting information is information related to at least one of a recording operation, a scheduled recording operation, and a time shift operation (Fig. 5, 502).

As to claim 23, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses further comprising:

transmitting the information on the broadcasting program having recording thereof failed to a program server or a broadcasting station (Para. 0066; Fig. 1 104, 136); and

re-receiving the broadcasting program having recording thereof failed from the program server or the broadcasting station, and recording the broadcasting program having recording thereof failed, after the step of requesting re-transmission of the broadcasting programs (Paras. 0066-0070).

As to claim 24, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses wherein the information on the transmitted broadcasting program is a program ID for matching to the program (Fig. 4, element 405).

As to claim 27, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses if recording of the broadcasting program fails as a result of the determination, renewing the information on the broadcasting program stored in the recording parameter storage part (Paras. 0063-0070).

3. **Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Pub. 2007/0031111 to Thiagarajan et al. "Thiagarajan" in view of U.S. Patent Pub. 2003/0099462 A1 to Matsugami and in view of U.S. Patent Pub. 2002/0110360 A1 to Potrebic and in further view of U.S. Patent Pub. 2002/0141451 A1 to Gates et al. ("Gates").**

As to claim 2, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. In addition Thiagarajan discloses wherein the channel demodulating part includes;
a channel receiving part configured to tune to, and demodulate a broadcasting signal on a particular channel (Client device 108)(0037).

Thiagarajan, Matsugami and Potrebic as modified do not expressly disclose to forward in a form of a transport TP stream; and a TP processing part configured to split the TP stream from the channel receiving part into an audio PES stream, a video PES stream, and a data stream.

Gates discloses to forward in a form of a transport TP stream; and a TP processing part configured to split the TP stream from the channel receiving part into an audio PES stream, a video PES stream, and a data stream (0036).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine teachings of Thiagarajan, Matsugami and Potrebic as modified with the teaching of Gates. Motivation to combine would be to demultiplex the transport stream to reproduce it on reproducing medium (0036).

4. **Claim 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Pub. 2007/0031111 A1 to Thiagarajan et al. ("Thiagarajan") in view of U.S. Patent Pub. 2003/0099462 A1 to Matsugami , in view of U.S. Patent Pub. 2002/0110360 A1 to Potrebic and in further view of U.S. Patent Pub. 2002/0021886 to Nakajima et al. (Nakajima).**

As to claim 11 and 17, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. However Thiagarajan, Matsugami and Potrebic as modified do not expressly disclose wherein the record starting time field, or the record end time field includes 4 bits of a month field, 5 bits of a day field, 5 bits of an hour field, and 6 bits of a minute field.

Nakajima discloses wherein the record starting time field, or the record end time field includes 4 bits of a month field, 5 bits of a day field, 5 bits of an hour field, and 6 bits of a minute field (Para. 0209).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of Thiagarajan, Matsugami and Potrebic as modified with the teaching of Nakajima. Motivation to combine the elements would have been to express the fields in to binary numbers for the reason to be able to integrate the system into a digital system.

5. **Claim 7, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Pub. 2007/0031111 A1 to Thiagarajan et al. "Thiagarajan" in view of U.S. Patent Pub. 2003/0099462 A1 to Matsugami and in further view of U.S. Patent Pub. 2002/0110360 A1 to Potrebic and in further view of U.S. Patent 5,737,477 to Tsutsumi.**

As to claim 7, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. However Thiagarajan, Matsugami and Potrebic as modified do not expressly disclose Tsutsumi discloses wherein the

upload/download controlling part is further configured to set the first identifying information value to '1 ', and to reset the second identifying information value to '0'.

Tsutsumi discloses wherein the upload/download controlling part is further configured to set the first identifying information value to '1 ', and to reset the second identifying information value to '0' (Col. 4, lines 30-41).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine Thiagarajan, Matsugami and Potrebic as modified with the teachings of Tsutsumi. Rationale to combine would have been that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As to claim 20, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. However Thiagarajan, Matsugami and Potrebic as modified do not expressly disclose resetting the identifying information of the single broadcasting program to '0' if the recording is successful as a result of the determination; and controlling to maintain the identifying information of the single broadcasting program to '1' if the recording fails.

Tsutsumi discloses resetting the identifying information of the single broadcasting program to '0' if the recording is successful as a result of the determination (Col. 4, lines 30-41); and controlling to maintain the identifying information of the single broadcasting program to '1' if the recording fails (Col. 4, lines 30- 41).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine Thiagarajan, Matsugami and Potrebic as modified with the teachings of Tsutsumi. Rationale to combine would have been that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As to claim 21, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. However Thiagarajan, Matsugami and Potrebic as modified do not expressly disclose changing the identifying information of the single broadcasting program if there is a user's record stop request.

Tsutsumi discloses further comprising changing the identifying information of the single broadcasting program if there is a user's record stop request (Col. 4, lines 30-41).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine Thiagarajan, Matsugami and Potrebic as modified with the teachings of Tsutsumi. Rationale to combine would have been that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

6. **Claim 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Pub. 2007/0031111 A1 to Thiagarajan et al. "Thiagarajan" in view of U.S. Patent Pub. 2003/0099462 A1 to Matsugami and in further view of U.S. Patent Pub. 2002/0110360 A1 to Potrebic and in further view of U.S. Patent Pub. 2004/0002987 A1 to Clancy et al. ("Clancy").**

As to claims 10 and 16, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. Thiagarajan further discloses wherein the recording parameter storage part includes one bit of an identifying information field (unique id 405), 20 bits of a record starting time field (broadcast start time 412), and 7 bits of a channel information field (channel number 410) (Fig 4, Program composite key 404).

Thiagarajan, Matsugami and Potrebic as modified do not expressly disclose a record end time field and number of bits to be used in each field.

McGee discloses a record end time field (Para. 0003).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine record end time information with channel information and a record starting time and Thiagarajan, Matsugami and Potrebic as modified with the Teaching of McGee. Motivation to combine the elements would have been to form a unique program combination for comparison to similar program elements in EPG data in an electronic program guide to determine whether a program will be re-broadcast.

Clancy discloses that EPG data may be in any binary format i.e. number of bits (Para. 0080).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of Thiagarajan, Matsugami and Potrebic as modified with the teachings of Clancy. Motivation to combine would have been to express the EPG data in binary to for facilitating storage and/or compression of data, so the system is able to store more information and process the information faster.

7. **Claim 18, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Pub. 2007/0031111 A1 to Thiagarajan et al. ("Thiagarajan") in view of U.S. Patent Pub. 2003/0099462 A1 to Matsugami and in view of U.S. Patent Pub. 2002/0110360 A1 to Potrebic and in view of U.S. Patent Pub. 2002/0188945 A1 to McGee et al. ("McGee").**

As to claim 18, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. Thiagarajan further the information on the broadcasting program includes channel information, a record starting time, and a record end time of the recording

program, and the record starting time is a starting time of the program intended to record in a case of the scheduled recording, and a time when a recording/time shift button is pressed in a case of direct recording or a time shift operation (0019)(0058). Thiagarajan, Matsugami and Potrebic as modified do not expressly disclose a record end time.

McGee discloses a record end time (Para. 0003).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine record end time information with channel information and a record

starting time and combine Thiagarajan, Potrebic and Tsutsumi as modified with the teachings of McGee. Motivation to combine the elements would have been to form a unique program combination for comparison to similar program elements in EPG data in an electronic program guide to determine whether a program will be re-broadcast.

As to claim 28, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. Thiagarajan further discloses wherein the step of renewing the information on the broadcasting program stored in the recording parameter storage part further includes:

re-receiving program related information from the program server or the broadcasting station(Para. 0066); and

overwriting the program related information on a relevant position of the recording parameter storage part, and scheduling writing of the program automatically by using stored record starting time and record end time (Inherent in 0066).

Thiagarajan, Matsugami and Potrebic as modified do not expressly disclose record end time.

McGee discloses a record end time (Para. 0003).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine record end time information with channel information and a record starting time. Motivation to combine the elements would have been to form a unique program combination for comparison to similar program elements in EPG data in an electronic program guide to determine whether a program will be re-broadcast.

As to claim 29, Thiagarajan, Matsugami and Potrebic as modified disclose everything claimed as applied in claim 1 above. Thiagarajan further discloses wherein the overwritten program related information includes channel information, a record starting time of a recording program (Para. 0050, 0066).

Thiagarajan, Matsugami and Potrebic as modified do not expressly disclose a record end time.

McGee discloses a record end time (Para. 0003).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine record end time information with channel information and a record starting time and Thiagarajan, Matsugami and Potrebic as modified with the teachings of McGee. Motivation to combine the elements would have been to form a unique program combination for comparison to similar program elements in EPG data in an electronic program guide to determine whether a program will be re-broadcast .

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHER KHAN whose telephone number is (571)270-5203. The examiner can normally be reached on 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter-Anthony Pappas can be reached on (571)272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. K./
Examiner, Art Unit 2481

/Peter-Anthony Pappas/
Supervisory Patent Examiner, Art Unit 2481